



STATE OF MARYLAND

# DMMH

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**June 27, 2009**

## Public Health & Emergency Preparedness Bulletin: # 2009:24 Reporting for the week ending 06/20/09 (MMWR Week #24)

### CURRENT HOMELAND SECURITY THREAT LEVELS

**National:** Yellow (ELEVATED) \*The threat level in the airline sector is Orange (HIGH)  
**Maryland:** Yellow (ELEVATED)

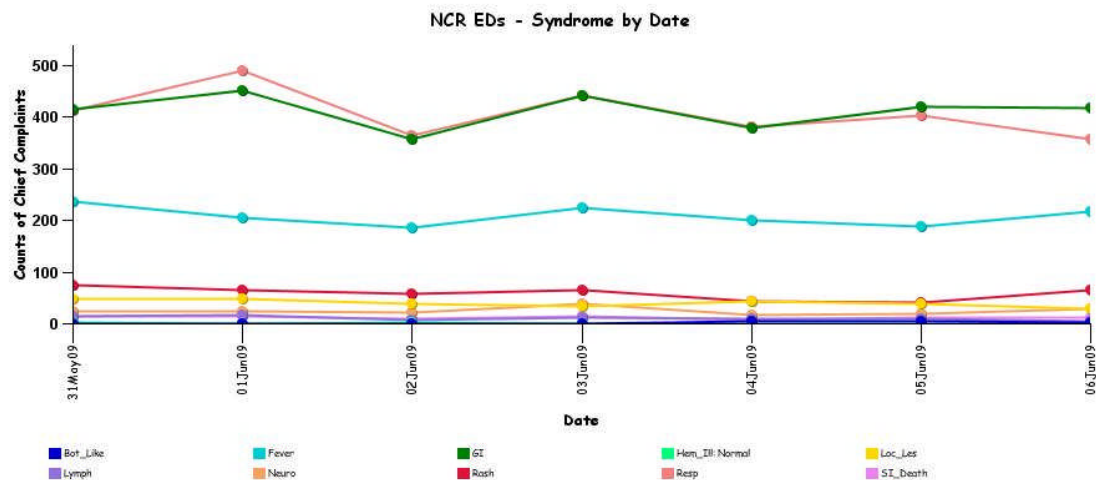
### SYNDROMIC SURVEILLANCE REPORTS

**ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):**

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

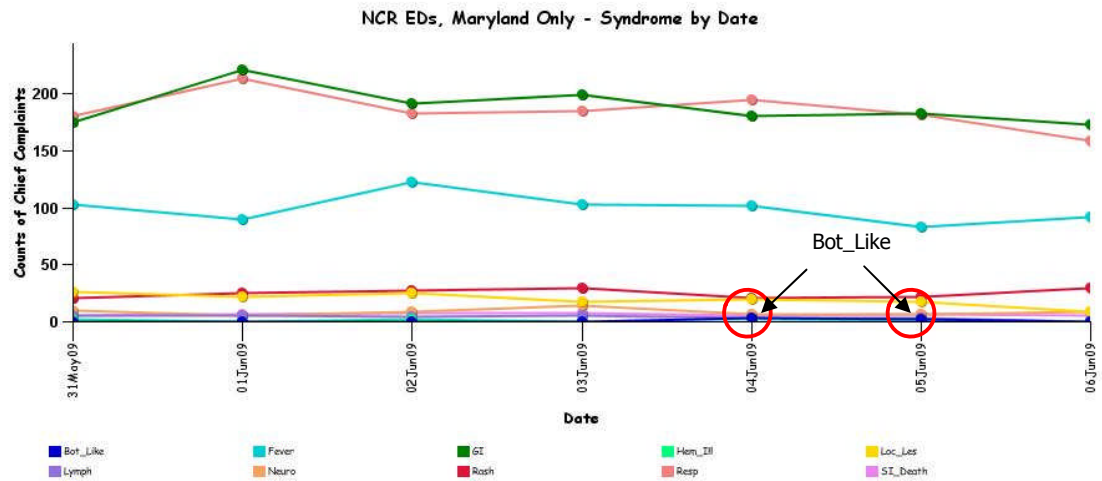
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

**\*\*Data for Week 24 not available in NCR ESSENCE at this time. Below is the Week 22 graph for NCR EDs.**

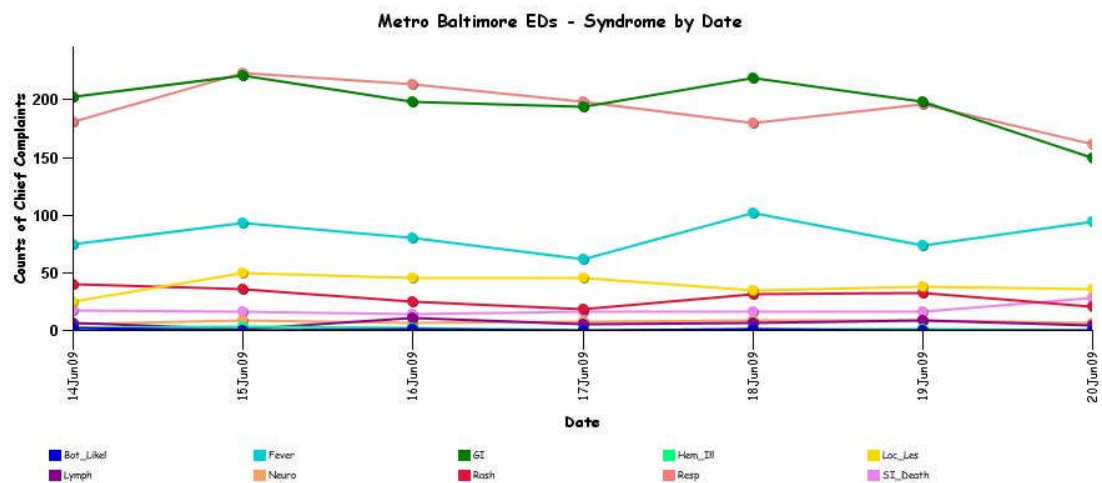


\* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system.

**\*\*Data for Week 24 not available in NCR ESSENCE at this time. Below is the Week 22 graph for NCR EDs, Maryland Only.**



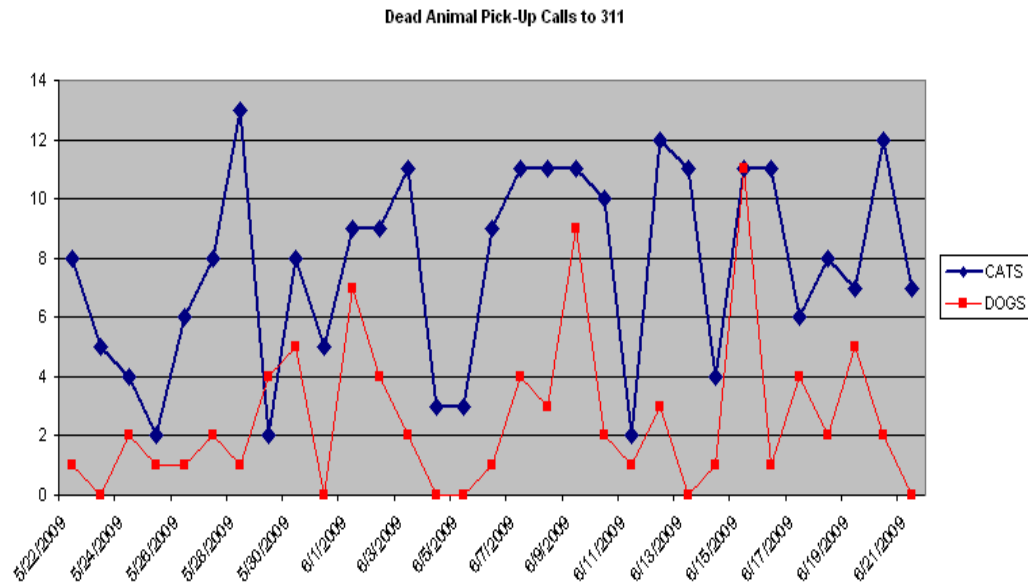
\* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system.



\* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

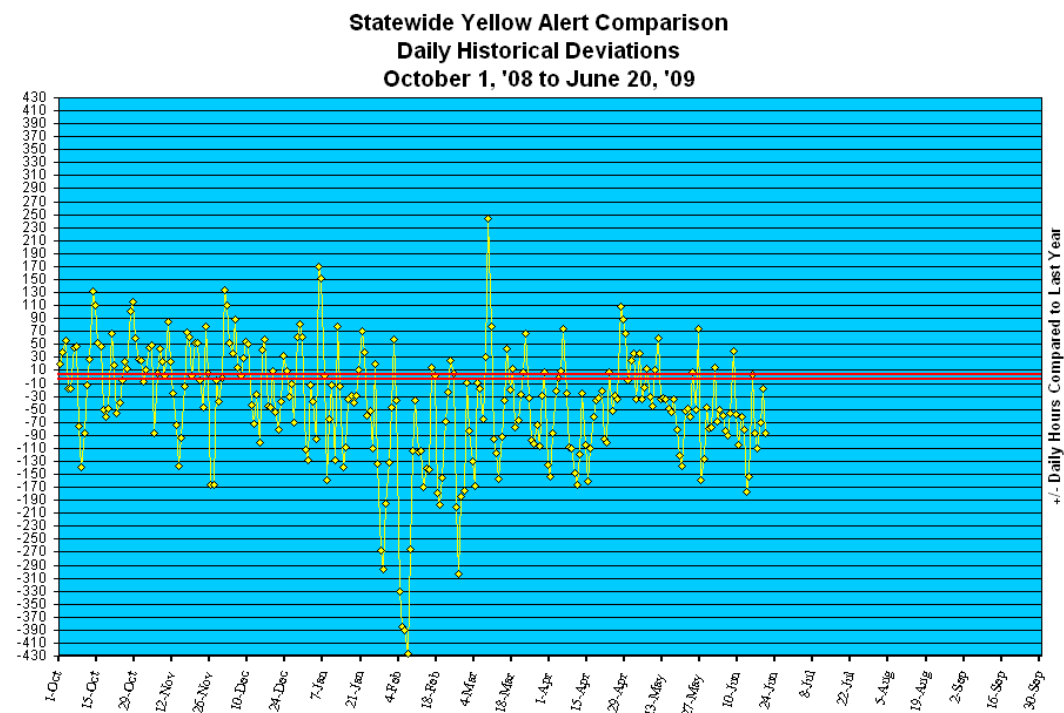
**\*\* Red Alerts are not indicated on this graph.**

**BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT:** No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.



#### **REVIEW OF EMERGENCY DEPARTMENT UTILIZATION**

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/08.



## **REVIEW OF MORTALITY REPORTS**

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to BT for the week.

## **MARYLAND TOXIDROMIC SURVEILLANCE**

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in May 2009 did not identify any cases of possible terrorism events.

## **REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS**

### **COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):**

<b>Meningitis:</b>	<b><u>Aseptic</u></b>	<b><u>Meningococcal</u></b>
New cases (June 14 – June 20, 2009):	12	0
Prior week (June 07 – June 13, 2009):	13	0
Week#24, 2008 (June 08 – 14, 2008):	12	0

**OUTBREAKS:** 4 outbreaks were reported to DHMH during MMWR Week 24 (June 14-20, 2009):

#### **2 Food borne Gastroenteritis outbreaks**

2 outbreaks of FOODBORNE GASTROENTERITIS associated with Restaurants

#### **2 Respiratory illness outbreaks**

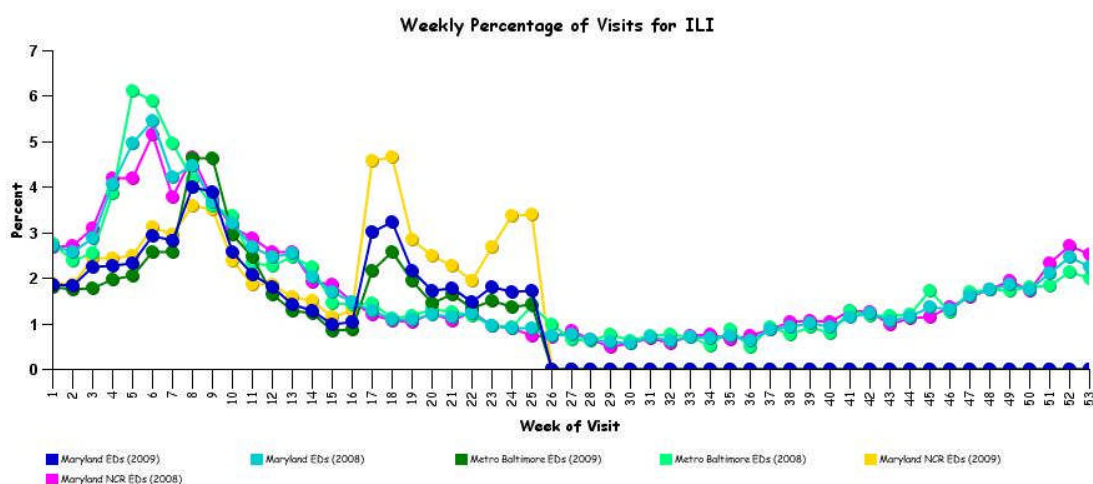
1 outbreak of INFLUENZA associated with an Institution

1 outbreak of PNEUMONIA associated with a Nursing Home

**MARYLAND INFLUENZA STATUS:** Influenza activity in Maryland for Week 24 is REGIONAL.

## **SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:**

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



\*Graph shows proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.

## **PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO Pandemic Influenza Phase:** Phase 6: Characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in Phase 5. Designation of this phase will indicate that a global pandemic is under way. Definition of Phase 5 is characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

**US Pandemic Influenza Stage:** Stage 0: New domestic animal outbreak in at-risk country

**\*\*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at:**  
<http://bioterrorism.dhmm.state.md.us/flu.htm>

**WHO update:** As of June 02, 2009, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 433, of which 262 have been fatal. Thus, the case fatality rate for human H5N1 is about 61%.

**AVIAN INFLUENZA, HUMAN, SUSPECTED (Indonesia):** 20 Jun 2009, The bird flu virus killed another victim in South Jakarta. A 5-year-old child died early 19 Jun 2009. Since 2005 until now, avian influenza H5N1 has killed 11 of a total of 13 cases in South Jakarta. Head of Livestock and Marine Subservice of South Jakarta, Chaidir Taufik, said the child was reported to have returned from his relatives in Sukabumi, West Java and then visited other relatives in Pejaten Barat in South Jakarta. During the stay in Sukabumi, numbers of chickens were reported to have suddenly died. After return from Pejaten Barat, the victim, the younger of 2 siblings, experienced high fever during the next day [8 Jun 2009], and received an antipyretic drug from a health worker. "The victim had improved immediately, but the fever came back on 13 Jun 2009. The child was then admitted to Triadapa hospital", said Chaidir, on the same day. Tegal Parang chieftain Abdul Khalit added that after further examination at Triadapa hospital, the victim was then allowed to return home. Three days later, the child's condition worsened and was accompanied by breathing difficulty. The child was then rushed to Triadapa hospital again. Chest X-ray revealed liquid accumulation in the lungs, which suggested the illness was caused by bird flu infection. "After 2 days of treatment, Triadapa hospital referred the child to Persahabatan hospital on 18 Jun 2009. But the child passed away 4 hours after admission, or early on Friday.

### **H1N1 INFLUENZA (Swine Flu):**

**INFLUENZA A (H1N1) (Worldwide):** As of 19 Jun 2009, 87 countries have officially reported 44,287 cases of influenza A (H1N1) infection, including 180 deaths.

**INFLUENZA A (H1N1) (Brazil):** 18 Jun 2009, The Centers for Disease Control and Prevention (CDC) and other experts have rejected a report that a new strain of the novel [2009 swine-origin] H1N1 influenza virus has been identified in a Brazilian patient. Scientists at Adolfo Lutz Bacteriological Institute in Sao Paulo said they found the new strain in a local patient, who has recovered, according to a Medical News Today (MNT) report, which was based on information from the institute and Agence France-Presse. The story said the scientists found "a number of discrete alterations in nucleotide and amino acid sequences" in the isolate's hemagglutinin (HA) gene. They also analyzed the matrix-protein (MP) gene and found no changes. But CDC spokesman Joe Quimby in Atlanta discounted the report that the isolate is a new strain. "Our scientists have no knowledge of a new strain of novel A H1N1 influenza," he said. "It's the same strain; it's not a new strain," Quimby added. The Brazilian researchers labeled the isolate A/Sao/PAOLO/1454/H1N1. They deposited the nucleotide sequences for the HA and MP genes in GenBank under accession numbers GQ247724 and GQ250156, the MNT report said. The MNT report said the virus came from a 26-year-old Sao Paulo man who fell ill shortly after returning from a trip to Mexico. He was hospitalized on 24 Apr 2009 and later recovered.

**INFLUENZA A (H1N1) (Worldwide):** 17 Jun 2009, A new analysis of the current swine-origin H1N1 influenza A virus suggests that transmission to humans occurred several months before recognition of the existing outbreak. The work, published online in Nature [11 Jun 2009], highlights the need for systematic surveillance of influenza in swine, and provides evidence that new genetic elements in swine can result in the emergence of viruses with pandemic potential in humans. "Using computational methods, developed over the last 10 years at Oxford, we were able to reconstruct the origins and timescale of this new pandemic," said Dr Oliver Pybus of Oxford University's Department of Zoology, an author of the paper. "Our results show that this strain has been circulating among pigs, possibly among multiple continents, for many years prior to its transmission to humans." Dr Pybus, along with Andrew Rambaut from the University of Edinburgh and colleagues, used evolutionary analysis to estimate the timescale of the origins and the early development of the epidemic. They believe that it was derived from several viruses circulating in swine, and that the initial transmission to humans occurred several months before recognition of the outbreak. The team concludes that 'despite widespread influenza surveillance in humans, the lack of systematic swine surveillance allowed for the undetected persistence and evolution of this potentially pandemic strain for many years.' The team included researchers from Oxford, the University of Edinburgh, the University of Hong Kong, and the University of Arizona.

**INFLUENZA A (H1N1) (Egypt):** 15 Jun 2009, As the number of confirmed cases of the A (H1N1) virus continued to climb in Egypt, the government vowed to redouble its efforts to hunt down the country's last surviving pigs. Assistant Health Minister Nasr al-Sayid on Friday confirmed three new cases of the disease. Al-Sayid said the three new cases had come from Canada, Sweden, and the United States and they had been taken to hospital for isolation and treatment. The Ministry of Health said the three cases brought the total number of confirmed cases of swine flu in Egypt to 15. As new confirmed infections continued to trickle in, the Egyptian government redoubled its efforts to hunt down the country's last remaining pigs. Hamid Samaha, the head of Egypt's General Authority for Veterinary Services, on Friday said government inspectors had found two surviving pigs in Giza, just across the river from Cairo. The pigs were culled on the spot. Samaha said the government had so far killed 15,000 pigs, and that it expected to kill all remaining Egyptian swine by the end of next week. He added the government would vaccinate 60 million fowl as part of its campaign against the related H5N1, or bird flu, virus. Last week, a four-year-old girl from the Nile Delta province of Daqahliya became the 27th person to die of bird flu in Egypt. Hers was the 72nd confirmed case of that virus in the country.

**Resources:**

<http://www.cdc.gov/h1n1flu/>

<http://www.dhmv.maryland.gov/swineflu/>

**NATIONAL DISEASE REPORTS:**

**E. COLI O157, FROZEN COOKIE DOUGH (USA):** 19 Jun 2009, The Food and Drug Administration (FDA) and the Centers for Disease Control and Prevention (CDC) are warning consumers not to eat any varieties of prepackaged Nestle Toll House refrigerated cookie dough due to the risk of contamination with E. coli O157:H7, a bacterium that causes food borne illness. The FDA advises that if consumers have any prepackaged, refrigerated Nestle Toll House cookie dough products in their home that they throw them away. Cooking the dough is not recommended because consumers might get the bacteria on their hands and on other cooking surfaces. Retailers, restaurateurs, and personnel at other food-service operations should not sell or serve any Nestle Toll House prepackaged, refrigerated cookie dough products subject to the recall. Nestle USA, which manufactures and markets the Toll House cookie dough, is fully cooperating with the ongoing investigation by the FDA and the CDC. The warning is based on an ongoing epidemiological study conducted by the CDC and several state and local health departments. Since March 2009 there have been 66 reports of illness across 28 states. 25 persons were hospitalized; 7 with a severe complication called Hemolytic Uremic Syndrome (HUS). No one has died. E. coli O157:H7 causes abdominal cramping, vomiting and a diarrheal illness, often with bloody stools. Most healthy adults can recover completely within a week. Young children and the elderly are at highest risk for developing HUS, which can lead to serious kidney damage and even death. Individuals who have recently eaten prepackaged, refrigerated Toll House cookie dough and have experienced any of these symptoms should contact their doctor or health care provider immediately. Any such illnesses should be reported to state or local health authorities. The FDA reminds consumers they should not eat raw food products that are intended for cooking or baking before consumption. Consumers should use safe food-handling practices when preparing such products, including following package directions for cooking at proper temperatures; washing hands, surfaces, and utensils after contact with these types of products; avoiding cross contamination; and refrigerating products properly. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) \*Non-suspect case

**INTERNATIONAL DISEASE REPORTS:**

**PLAGUE, BUBONIC (Libya):** 16 Jun 2009, Libyan authorities have reported an outbreak of bubonic plague in the Mediterranean coastal town of Tubruq, and the World Health Organization (WHO) was sending a team to investigate, a WHO official said on 16 Jun 2009. The cases, approximately 16 to 18 have been reported, would be the 1st in more than 2 decades in Libya of the disease known in medieval times as the Black Death, according to John Jabbour, a Cairo-based emerging diseases specialist at WHO. "It is reported as bubonic plague," Jabbour said, adding WHO still didn't have "a full picture" of the situation. "It is officially reported by Libya... Tomorrow [17 Jun 2009], the WHO is deploying a mission to Libya to investigate the whole situation, to see how many of the cases are confirmed, or not confirmed." He said preliminary information from Libyan authorities showed 16 to 18 reported cases including one death, and that Tripoli had asked for assistance from the global health body. Tubruq, where the new cases were reported, is approximately 125 km from the Egyptian border and was the scene of previous plague cases decades ago, Jabbour said. Egypt, already fighting to contain an outbreak of the H1N1 flu virus, said it had no reported cases of plague. Globally the WHO reports about 1000 to 3000 plague cases each year, with most in the last 5 years occurring in Madagascar, Tanzania, Mozambique, Malawi, Uganda and the Democratic Republic of Congo. The USA sees about 10 to 20 cases each year. (Plague is listed in Category A on the CDC list of Critical Biological Agents) \*Non-suspect case

**ANTHRAX, HUMAN, BOVINE (India):** 15 Jun 2009, At least 15 families fell ill due to anthrax in the tribal dominated Koraput district of Orissa. Locals said that they fell ill after consuming contaminated meat of the cattle. Anthrax, a highly infectious animal disease, spreads every year in Koraput district at the beginning of the raining season. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) \*Non-suspect case

#### **OTHER RESOURCES AND ARTICLES OF INTEREST:**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://bioterrorism.dhmd.state.md.us/>

Maryland's Resident Influenza Tracking System: [www.tinyurl.com/flu-enroll](http://www.tinyurl.com/flu-enroll)

**Novel Influenza A (H1N1) Virus Infections among Health-Care Personnel - United States, April-May 2009**  
**MMWR June 19, 2009 / 58 (23); 641-645.** To better understand the risk for acquiring infection with the virus among HCP and the impact of infection-control recommendations, CDC solicited reports of infected HCP from state health departments. Findings suggest that transmission of novel influenza A (H1N1) virus to HCP is occurring in both health-care and community settings and that additional messages aimed at reinforcing current infection-control recommendations are needed. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5823a2.htm>

**Multistate Outbreak of *E. coli* O157:H7 Infections Linked to Eating Raw Refrigerated, Prepackaged Cookie Dough** – Additional updated information can be found at: <http://www.cdc.gov/ecoli/2009/0622.html>

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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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